

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-5 and 10-13 are in the case.

I. ELECTION/RESTRICTIONS

The election of Group I is hereby affirmed. Claims 6-9 (Group II) have been canceled without prejudice.

II. THE FORMAL REJECTION

The claims are rejected on formal grounds due to the recitation of preferred embodiments. In response, the claims have been amended to remove the preferred embodiments which are now presented in separate dependent claims. Withdrawal of the formal rejection is respectfully requested.

III. THE ANTICIPATION REJECTION

Claims 1, 3 and 4 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Crane *et al.* (Crane), U.S. Patent 3,458,414. The rejection is respectfully traversed.

As claimed, there is provided an electromechanical filtering unit, comprising a conduit capable of conducting electricity, at least one first electrode connectable to a high voltage power supply (EHT) and at least one second electrode having a plurality of discrete openings which is earthed. The electrodes are positioned within the conduit and connected to the conduit such that electricity can pass between the electrodes via the conduit.

The claimed filtering unit functions by generating an electric field within the conduit by connection of the first electrode to the high voltage supply. Solid particles suspended in a liquid attach themselves to the second electrode, and a liquid with a reduced solids content passes through the conduit. The claimed filtering unit is especially suited for separating fine catalyst particles from a hydrocarbon medium.

Crane discloses a swimming pool water conditioner which includes an electrolytic cell for the electrolysis of dissolved halogen salts present in the water to provide an oxidiser for the purpose of keeping the swimming pool water clear. The electrolytic cell disclosed in Crane is not a filter, and it does not function as a filter since a separate filter is described in the swimming pool water conditioning system exemplified in Crane.

As Crane does not describe a filtering unit as claimed, it is clear that Crane cannot be an anticipation of the claimed invention. Withdrawal of the anticipation rejection is respectfully requested.

IV. THE OBVIOUSNESS REJECTIONS

Dependent claim 2, which defines the conduit as cylindrical, is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Crane and further in view of Sale *et al.* (Sale), U.S. Patent 6,709,567. Claim 5, directed to a filtering process using the claimed electromechanical filtering unit, is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Sale in view of Crane. The rejections are respectfully traversed.

Referring to the rejection of claim 2, the Action asserts that it would be obvious to modify Crane based on Sale. However, as noted above, the electrolytic cell disclosed in Crane is for the purpose of conditioning swimming pool water and is **not** a filter. One

of ordinary skill would not therefore have been motivated to refer to Crane in the context of a filtration unit.

Sale also does not disclose a filter but, rather, an apparatus for treating water containing contaminants by providing an electrolytic system promoting oxidation and reduction of the contaminants. The possibility of precipitation of solid phase constituents is disclosed in Sale (e.g. col. 4, lines 20-24) but, as stated in Sale, these are "*solid phase precipitates that may have formed*" (col. 4, lines 23-24) i.e., solid phase constituents that are generated by the water treatment process itself. Thus, the disclosure of solid phase precipitates in Sale is not a disclosure of filtration of solid particles from a liquid phase using the electrolytic system disclosed therein.

As neither Crane nor Sale relates to filtration, one of ordinary skill, as of the filing date of the present application, would not have been motivated to arrive at the presently claimed invention based on those two references, taken singly or in combination. The subject matter of claim 2 is not therefore rendered unpatentable by Crane and/or Sale. Withdrawal of the obviousness rejection of claim 2 is respectfully requested.

The filtering process of claim 5 is likewise not suggested Sale and Crane. In particular, as explained above, neither Crane nor Sale relates to filtration of particles from a liquid medium. Crane discloses a swimming pool water conditioner and Sale discloses an apparatus for treating water containing contaminants. The processes disclosed in both Crane and Sale operate by electrolysing compounds present in the water that is to be treated, **not** by filtration. Withdrawal of the obviousness rejection of claim 5 is respectfully requested.

New claims 12 and 13 are dependent upon claim 5 and therefore are not suggested by Sale and Crane for the same reasons as discussed above for claim 5. Furthermore, the liquid medium in which the filtering process of new claims 12 and 13 is performed is a hydrocarbon liquid medium. The processes described in both Sale and Crane are processes which are directed to the treatment of an aqueous medium. Withdrawal of the obviousness rejections is respectfully requested.

V. AMENDMENTS

Claim 1 has been amended to remove the preferred embodiments, and each of the embodiments relating to the first and second electrodes have been made the subject matter of new dependent claims. Two further dependent claims are presented further defining the filtering process of claim 5, in which the new dependent claims further define the solid particles and the liquid which is subjected to the filtering process. Support appears at page 4, line 31 to page 5, line 3 of the original application (WO 2004/082825 A1). Customary headings are presented in the specification. No new matter is entered. Favorable action is awaited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Leonard C. Mitchard/
Leonard C. Mitchard
Reg. No. 29,009

LCM:Iff
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100